Page 1 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics

Helmbrecht, et al. Docket: IRIS-010001150 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003 IRIS-01000US0 Larry E. Vierra (415) 369-9660 Atty: Phone:

110 105 100

FIGURE 1 **PRIOR ART**

Page 2 of 13
Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al. Docket: IRIS-01000US0

Title: Applicants: Appl. No.: Filing Date: Larry E. Vierra (415) 369-9660 Atty: Unknown November 7, 2003 Phone:

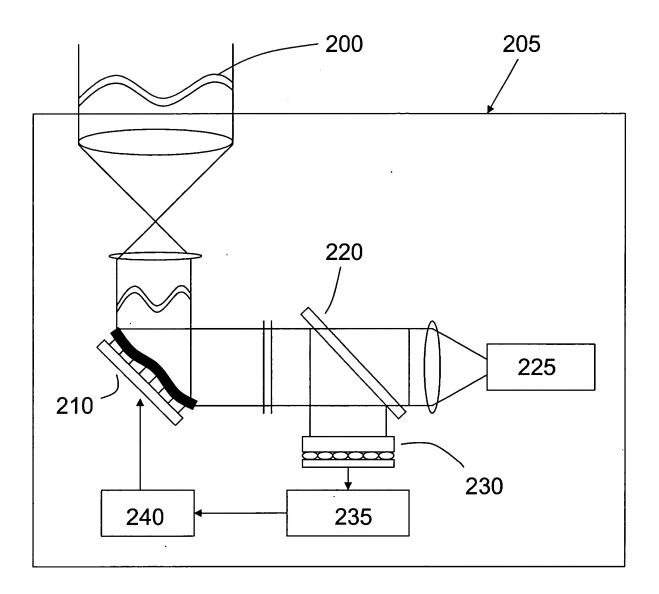


FIGURE 2 **PRIOR ART**

Page 3 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown Atty: Larry E. Vierra

November 7, 2003 Phone: (415) 369-9660 Title: Applicants: Appl. No.: Filing Date:

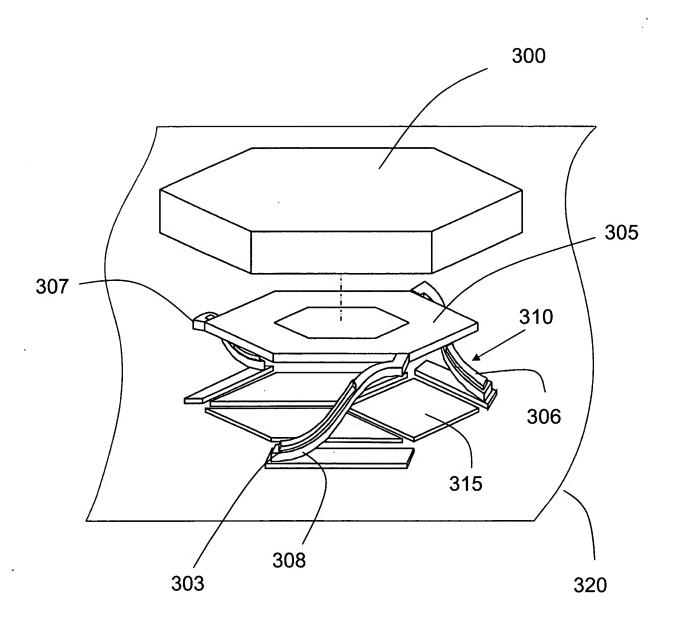


FIGURE 3

Page 4 of 13
Actuator Apparatus and Method for Improved Deflection Characteristics
Helmbrecht, et al. Docket: IRIS-01000US0

Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003 Larry E. Vierra (415) 369-9660 Atty: Phone:

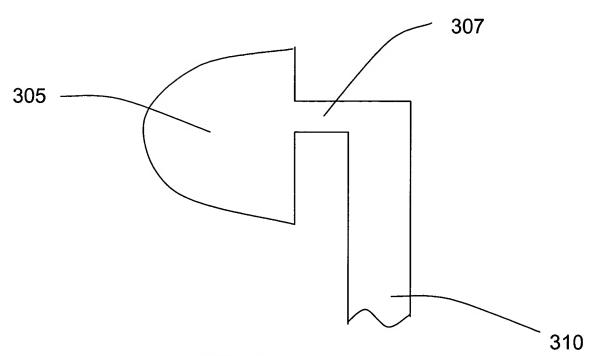


FIGURE: 4

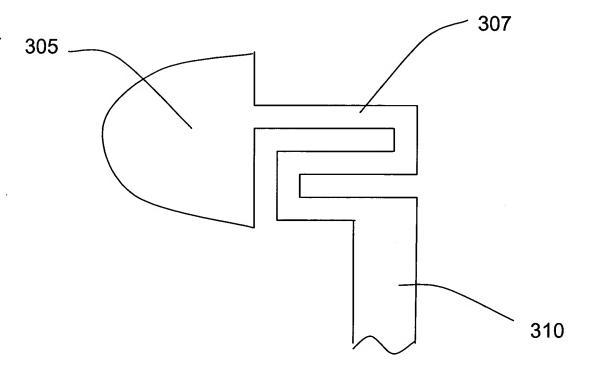


FIGURE: 5

Page 5 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al. Docket: IRIS-01000US0
Unknown Atty: Larry E. Vierra
November 7, 2003 Phone: (415) 369-9660 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003

. .

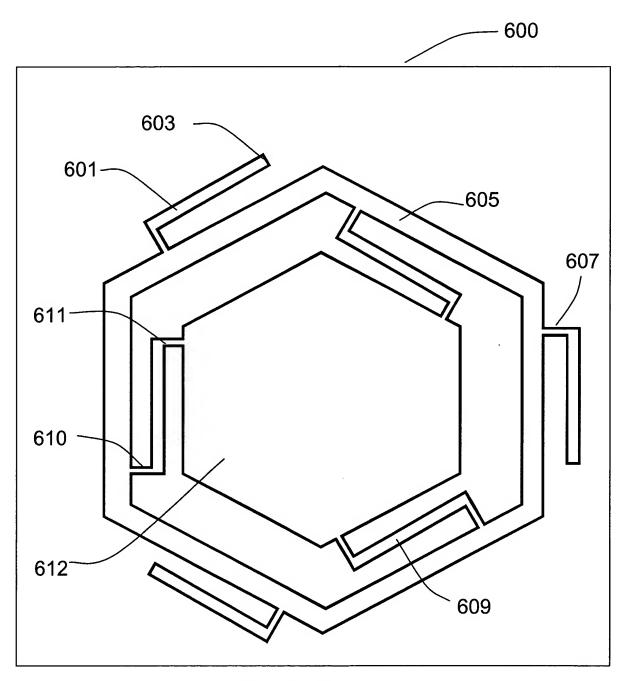


FIGURE: 6

Page 6 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown Atty: Larry E. Vierra

Phone: (415) 369-9660 Title: Applicants:

Appl. No.: Filing Date:

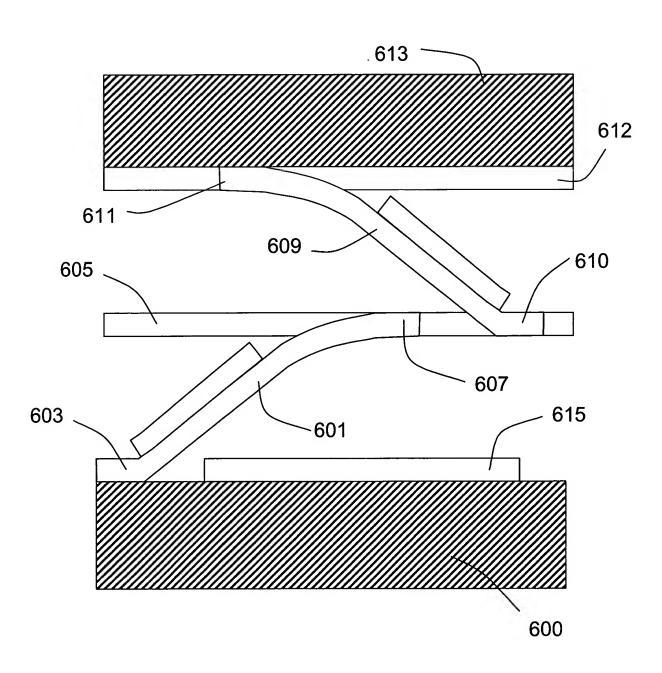


FIGURE: 7

Page 7 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown

Atty:

November 7, 2003

Phone:

Page 7 of 13

IRIS-01000US0

Larry E. Vierra

(415) 369-9660 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003

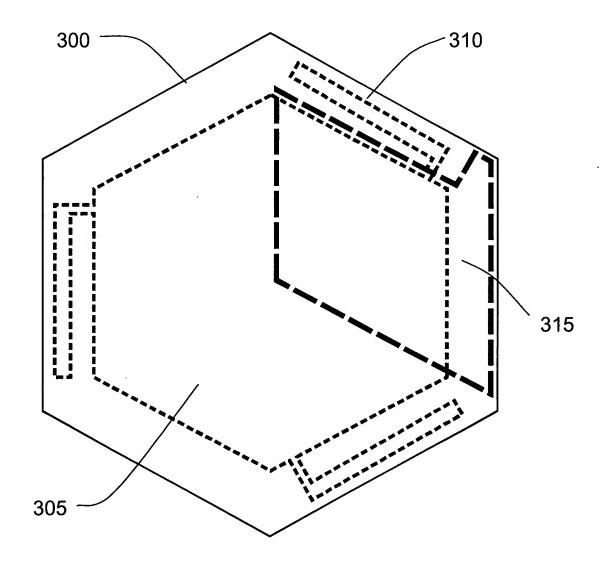


FIGURE: 8

Page 8 of 13

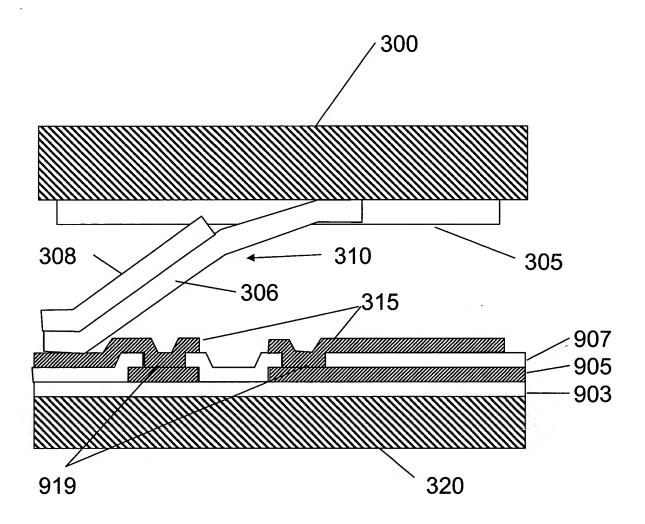
Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

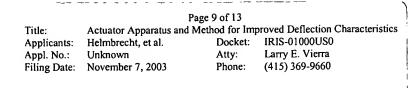
Unknown

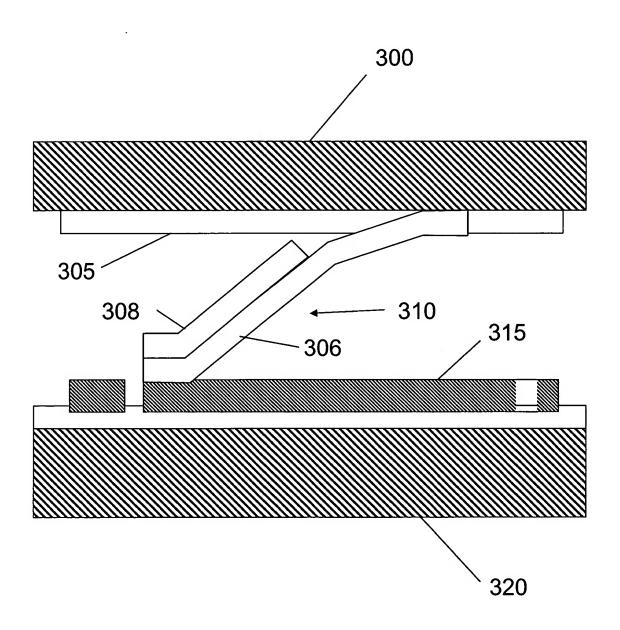
Atty:

Larry E. Vierra

Phone: (415) 369-9660 Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003







Page 10 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown

Atty:

Larry E. Vierra

Phone: (415) 369-9660 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003

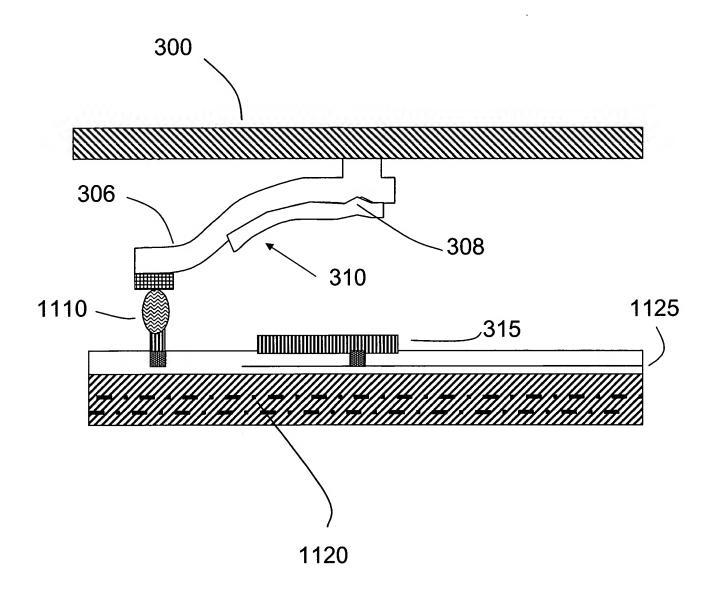


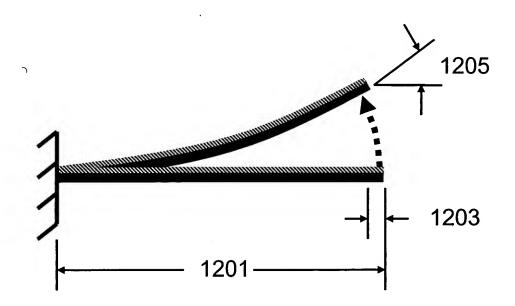
FIGURE 11

Page 11 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown Atty: Larry E. Vierra

Phone: (415) 369-9660 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003



Title:

Page 12 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.

Unknown Atty: Larry E. Vierra

Phone: (415) 369-9660 Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003

angle of twist per unit moment (θ/Nm)	t (µm)	i (µm)	h (µm)
3.50E+07	1.1	10	10
1.40E+07	1.1	10	4
6.10E+07	1.1	6	10
7.00E+06	1.1	10	2

Page 13 of 13

Actuator Apparatus and Method for Improved Deflection Characteristics Helmbrecht, et al.
Unknown Atty: IRIS-01000US0
Unknown Atty: Larry E. Vierra
November 7, 2003 Phone: (415) 369-9660 Title: Actuator Apparatus
Applicants: Helmbrecht, et al.
Appl. No.: Unknown
Filing Date: November 7, 2003

